Hepatitis B Fact Sheet

What is hepatitis B?
Hepatitis B is a contagious liver disease that is caused by the hepatitis B virus. Hepatitis means inflammation of the liver. Inflammation is the painful, red swelling that results when tissues of the body become injured or infected and can cause organs to not work properly. When first infected, a person can develop an 'acute' infection, which can range from a very mild illness with few or no symptoms to a long term, serious condition that may require hospitalization.

> **Acute hepatitis B virus infection** is a short-term illness that occurs within the first six months after someone is exposed to the hepatitis B virus. Acute infection can - but does not always - lead to chronic infection.
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> **Chronic hepatitis B virus infection** is a long-term illness that occurs when the hepatitis B virus remains in a person's body. Over time, the infection can cause serious health problems.
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> **Perinatal hepatitis B infection** is an infection of a newborn baby by their infected mother. This type of infection can be avoided if it is known that mother is hepatitis B positive before delivery and the baby is given hepatitis B vaccine and hepatitis B Immune Globulin shortly after birth. Further information is available at http://www.hepb.org/patients/pregnant_women.htm.

How is the virus spread?
The hepatitis B virus is spread when infected blood, semen, or vaginal fluids enter the body of a person who is not infected and is 50-100 times more infectious than the human immunodeficiency virus (HIV). Hepatitis B is spread by sexual activity, sharing needles, syringes or other drug-injection equipment, sharing personal items such as razors or toothbrushes, direct contact with the blood or open sores of an infected person, exposure to blood from needle sticks and birth (spread from infected mother to baby). Hepatitis B virus is NOT spread through breastfeeding, sharing eating utensils, hugging, kissing, holding hands, coughing or sneezing.

What are the symptoms?
Symptoms are flu-like and include loss of appetite, stomach pain, nausea, vomiting, fever, fatigue, dark urine, clay colored bowel movements, occasional skin rashes, joint pain and jaundice (yellowing of the skin and the whites of the eyes). However, most young people have mild symptoms that can go unrecognized.

How soon do the symptoms appear?
Symptoms develop slowly and may appear 45-180 days (average is 60-90 days) after exposure to an infected person. Symptoms can appear up to 6 months after exposure.

Who gets hepatitis B?
Certain groups have a greater risk of becoming infected. These include infants born to infected mothers, injection drug users, sexual partners of infected people, men who have sex with men, certain populations with high rates of hepatitis B infection, healthcare and public safety workers, and anyone who has frequent contact with blood. Individuals from Asia, the Mediterranean, and Africa are also at increased risk. Clients and staff of institutions for the mentally disabled are at higher risk than the general population, but lower risk than those listed above.

How long can an infected person spread the virus?
An infected person can spread the virus for several weeks before symptoms appear and as long as the person is ill. Persons who develop lifelong infection may spread the virus for their entire lives. Long-term infection may result in liver disease or cancer.

Can a person get hepatitis B again?
No. One infection with the hepatitis B virus protects an individual from getting it again. However, there are different types of viral hepatitis, and infection with hepatitis B will not protect against other types of hepatitis. Patients with hepatitis B should be vaccinated against hepatitis A.

How is hepatitis B diagnosed?
A blood test is used to detect infection with the hepatitis B virus.

What is the treatment for acute (short term) hepatitis B?
There is no specific treatment for acute hepatitis B. Health care providers usually recommend rest, adequate nutrition, and fluids. Individuals should consult with their health care provider to ensure proper treatment to avoid chronic liver disease.

How likely is it that acute hepatitis B will become chronic (long term)?
The likelihood depends upon the age at which someone becomes infected. The younger a person is when infected with hepatitis B virus, the greater the chance of developing chronic hepatitis B. Approximately 90% of infected infants will develop chronic infection. The risk reduces as a child gets older. Approximately 25%-50% of children infected between the ages of 1 and 5 years will develop chronic hepatitis. The risk drops to 6%-10% when a person is infected over 5 years of age. Worldwide, most people with chronic Hepatitis B were infected at birth or during early childhood.

How is chronic hepatitis B treated? Medications are available to treat chronic hepatitis B. Consult with your health care provider. **It is important to realize that hepatitis B is a lifetime illness that requires lifetime treatment in order to prevent long term liver damage including cirrhosis (scarring of the liver) and liver cancer.**

The University of Utah is currently enrolling patients into studies looking at the effectiveness of recently approved hepatitis B and C medications. Contact the Utah Department of Health Bureau of Epidemiology at 801-538-6191 for information.

What can be done if a person is exposed to someone infected with hepatitis B?
Hepatitis B immune globulin (HBIG) should be given as soon after exposure as possible. HBIG provides temporary immunity to the hepatitis B virus. Hepatitis B vaccine is also recommended for people at high risk of additional exposure. For infants born to infected mothers, the combination of HBIG and vaccine is effective at preventing infection.

How can the spread of hepatitis B be stopped?
Hepatitis B infection can be prevented by getting vaccinated. Testing all pregnant women for hepatitis B is also recommended to prevent spread from infected mothers to their infants. Syringes, acupuncture and tattooing needles should never be reused. Condoms are highly effective against sexual transmission.

Is there a vaccine to prevent hepatitis B?
Yes. Three doses are needed to complete the vaccine series.

Who can get the hepatitis B vaccine?
The hepatitis B vaccine is **recommended specifically for all infants and children** by the Centers for Disease Control (CDC) and the American Academy of Pediatrics (AAP). The CDC also recommends that adults in high-risk groups be vaccinated. The following list is a general guide for vaccination, but since every person is at some risk for infection, these guidelines should be individualized for each situation.

- All infants at birth and all children up to 18 years
- Health care professionals and emergency personnel
- Sexually active teens and adults
- Men who have sex with men
- Sex partners or close family/household members living with an infected person
- Families considering adoption, either domestic or international travelers to countries where hepatitis B is common (Asia, Africa, South America, the Pacific Islands, Eastern Europe, and the Middle East)
- Patients with kidney disease or undergoing dialysis
- Residents and staff of correctional facilities and group homes
- Any person who may fall into a high risk group due to occupation or lifestyle choices

Is the hepatitis B vaccine series effective?
Yes, the hepatitis B vaccine series is very effective in preventing hepatitis B virus infection. After receiving all three doses, hepatitis B vaccine provides greater than 90% protection to infants, children, and adults who were immunized before being exposed to the virus.

Where can I get the hepatitis B vaccine?
Talk to your doctor or health care professional or call your local health department. Some clinics offer low-cost vaccines.

What is the difference between hepatitis A, hepatitis B and hepatitis C?
Hepatitis A, B, and C are diseases that cause inflammation of the liver, but are caused by three different viruses. Although each can cause similar symptoms, they have spread differently and can affect the liver differently. Acute infection of all three typically causes flu-like illness that may or may not be accompanied by brown urine, tan or gray colored bowl movements and jaundice (yellowing of the whites of the eyes and skin). Hepatitis A does not result in a chronic infection. Both hepatitis B and C typically lead to chronic infection that requires treatment, and may last a lifetime and lead to liver failure or cancer. It is extremely important that you seek medical advice if you have hepatitis B or C.

Hepatitis B and C can begin as acute infections, but in some people, the virus remains in the body, resulting in chronic disease and long-term liver problems. There are vaccines to prevent hepatitis A and B; however, there is not one for hepatitis C. If a person has been infected with one type of viral hepatitis in the past, it is still possible to get the other types if exposed to the virus.

Visit the following website for more information about the differences between hepatitis A, B and C. http://www.cdc.gov/hepatitis/Resources/Professionals/PDFs/ABCTable.pdf

Where can I get more information?

- Your personal health care provider
- Your local health department, listed in your telephone directory, or http://www.ualhd.org/lhds.html
- The Utah Department of Health, Bureau of Epidemiology 801-538-6191
- CDC's hepatitis FAQ website: http://www.cdc.gov/hepatitis/B/bFAQ.htm#overview

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